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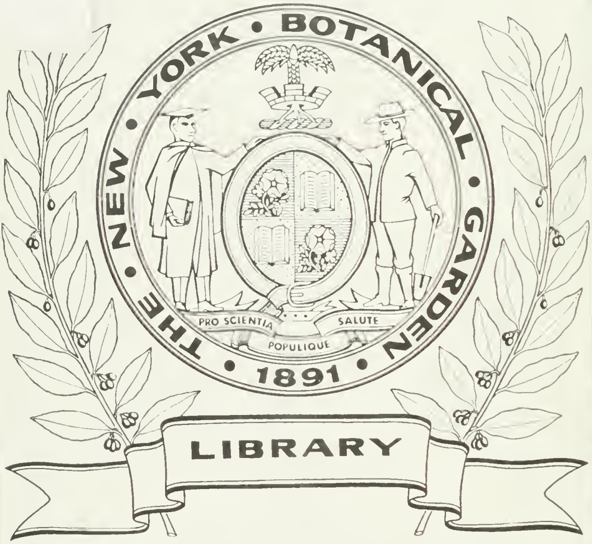
CRÜGER

OUTLINE
OF THE
FLORA OF
TRINIDAD

1858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OUTLINE

OF

THE FLORA OF TRINIDAD.

BY

HERMAN CRÜGER.

LONDON:
PRINTED BY PETTER AND GALPIN,
LA BELLE SAUVAGE YARD, E.C.

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THE FLORA OF TRINIDAD.

Trinidad exhibits—if not on a grand scale, at least within striking and well defined limits—the distinctive characteristics of an intertropical American country. The variety of its soil and formations, the abundant supply of water with which it is blessed, give to the vegetable covering of this island the glowing colours, the richness and grandeur of forms which astonish and charm the admirer and lover of nature, and invite the thoughtful and scientfic mind to study and meditation. No wonder that the grateful Indian called this spot a paradise, swinging away his eventless life in the *chinchorro*, whilst below and around, the teeming soil spontaneously afforded him not only the necessaries, but even the luxuries of life.

> "Mollia securæ peragebant otia gentes;
> Ipsa quoque immunis, rastroque intacta, nec ullis
> Saucia vomeribus, per se dabat omnia, tellus."
>
> Ovid i.12.

But Ovid did not dream of South America; nor could he have foreseen its history, or he would, in his description of the other ages of the world, have depicted in vivid colours the civilising bloodhounds, and the taming whip of the slaveholder, as prominent features in the drama of a far-distant era—the AGE OF CHRISTIANITY!

"The character of a population depends greatly, though not solely, on the aspect of the vegetable world of a country," says Von Humboldt, in his "Views of Nature." Were I possessed of the pen or pencil of a Humboldt, I would essay to place in their mutual relation the luxuriance and grandeur of our forest-woods, with the careless, though amiable character of the Trinidadian; but this is hardly within the scope of these pages. I may here, however, as well enregister my conviction that Trinidad—like other fertile tropical countries—will, from its own boundless luxuriance, never nourish a very industrious population.

The general character of our flora approaches that of Guiana; partaking, however, more or less, of that of the West India islands, in general, as will appear hereafter. The botanical traveller will therefore find the works of Aublet as useful and necessary to him in his researches as those of Swartz, Bonpland, and Kunth. This is, however, not to be understood in the sense that we have absolutely the same *species* of plants that grow in and characterise Guiana and the Antilles, for I have found this to be true in respect of *genera* only; but as genera, in most cases, exhibit the same vegetative characteristics in all, or most of their species, this is quite sufficient to demonstrate and explain the similarity of general aspect between our island, its continental neighbour, and the sister-islands.

With regard to species, I must say that of them I have not been able to determine a great number, and have, therefore, limited myself to giving in the annexed catalogue the names of genera only. Species can only be determined with absolute accuracy in large cities, where collections of plants, and libraries of reference, can supply all comparative informations. I could give only approximate determinations, which would prove of no real use; I have, therefore, preferred giving none.

The lists of species which I have seen of other islands, such as Barbadoes and St. Thomas, fully corroborate the truth of what I assert; for they are replete with errors of all sorts, merely because the writers thought it incumbent on them to particularise the species.

Forest-growths take the most predominant place in our vegetation; and that which at once strikes the European on reaching our shores, is the multiplied variety of forms and foliage they present. A large number of families contribute their quota to these formations; among which may be mentioned Palms and Lauraceæ, Rubiaceæ and Apocynaceæ, Verbenaceæ and Cordiaceæ, Myrsinaceæ and Sapotaceæ; as also Ebenaceæ, Myristicaceæ, and Anonaceæ, Capparidaceæ, Malvaceæ, and Sterculiaceæ; with Tiliaceæ, Ternströmiaceæ and Clusiaceæ, Meliaceæ and Cedrelaceæ, Malpighiaceæ and Sapindaceæ, Euphorbiaceæ and Burseraceæ, Simarubaceæ and Diosmeæ, Melastomaceæ and Myrtaceæ, Chrysobalanaceæ, and, lastly, perhaps the richest family, Leguminosæ, or Fabaceæ, including Swartzieæ, and Mimoseæ. A glance at this list of families shows at once the difference which exists between these forests and those of higher latitudes, where, not only a few families, but also a few species, form the whole woodland vegetation. Nor ought it to be believed that only a paucity of the above families is met with in each forest, for the aggregate is almost everywhere of the same variety, whilst the species, and genera, perhaps, are different. In plains, with a fertile soil, for instance, certain forms predominate, without altogether excluding others; and the like arrangement occurs in other localities. A rich soil is generally indicated by the cabbage-palm (*Areca Oleracea*), and the carat (*Copernicia*); whereas, the timit (*Manicaria*) grows in light sandy soils, generally in company of a variety of trees of the myrtle tribe. In general, palms are indicative of the quality of the soil, and of the respective productions which can be raised on a given spot.

The northern chain of mountains, covered nearly everywhere with dense forests, is intersected at various angles by numbers of valleys presenting the most lovely character. Generally each valley is watered by a silvery stream, tumbling here and there over rocks and natural dams, ministering in a continuous rain to the strange-looking river-canes, dumb-canes, and balisiers, that voluptuously bend their heads to the drizzly shower which plays incessantly on their glistening leaves, off which the globules roll in a thousand pearls, as from the glossy plumage of the stately swan. Amid such Dryad-haunts as these, well might the poet realise the myth of the bathing nymph, and gloating Pan behind some broad-leafed fern concealed, with all the emotions of the Satyr-God!

One of these falls deserves particular notice—the Cascade of Maraccas—in the valley of that name. The high-road leads up the valley a few miles, over hills, and along the windings of the river, exhibiting the varying scenery of our mountain district, in the fairest style. There, on the river side, you may admire gigantic pepper trees, or the silvery leaves of the *Calathea*, the lofty bamboo, inclosing, perhaps, as in a leafy frame, a group of girls bathing beneath its many-stemmed shade, or the fragrant *Pothos*, the curious *Cyclanthes*, or frowning nettles, some of the latter from ten to twelve feet high. But how describe the numberless treasures which everywhere strike the eye of the wandering naturalist? Here, on the steep hill-side, the hut of the *Conuquero* emerges from a few fruit trees, such as the orange, lime, mangoe, and avocado; and, if he be a Spaniard, you may perceive him sitting on a bench before his door, near a rose or other flower-tree, meditating on better, bygone times, or saddened by the untimely death of a favourite game-cock.

To reach the *Chorro*, or cascade, you strike to the right into a "path" that brings you first to a cacao plantation, through a few rice or maize fields, and then you enter the shade of the virgin forest. Thousands of interesting objects now attract your attention: here, the wonderful *Norantia*, or the resplendent *Calycophyllum*, a *Tabernœmontana*, or a *Faramea*, filling the air afar off with a fragrance of their blossoms; there, a graceful *Heliconia* winking at you from out some dark ravine. At the margin of the latter let us take our seat, and, after having had a draught of the crystal element, I will tell you, during our rest, the names of the fairy forms that surround us; whilst a host of crickets and lizards chirp and whistle under concealment of the decaying leaves, making holyday the whole year round. That shrubbery above is composed of a species of *Bœhmeria, or Ardisia*, and that scarlet flower belongs to our native *Aphelandra*. In the rear, there are one or two *Philodendrons*—disagreeable guests; for their smell is bad enough, and they blister when imprudently touched. There also you may see a tree-fern, though a small one. Nearer to us, and low down, below our feet, that rich panicle of flowers belongs to a *Begonia;* and here, also, is an assemblage of ferns of the genera *Asplenium*, *Hymenophyllum* and *Trichomanes*, as well as of *Hepaticœ* and mosses. But, what are those yellow and purple flowers hanging above our heads?—They are *Bignonias* and *Mucunas*—creepers straying from afar, and having selected this spot, where they may, under the influence of the sun's beams, propagate their race. Those chain-like, fantastic, strange-looking lianes, resembling a family of boas, are *Bauhinias;* and beyond, through the opening, you see in the abandoned ground of some squatter's garden, the trumpet-tree (*Cecropia*), and the groo-groo, the characteristic plants of the *rastrajo.*

Now, let us proceed on our walk; we are near the cascade:—Here it is opposite you, a grand spectacle, indeed! From a perpendicular wall of solid rock, of more than ~~thirty three~~ 300. feet, down rushes a stream of water splitting in the air and producing a constant shower, which renders this lovely spot singularly and deliciously cool. Nearly the whole extent of this natural wall is covered with plants, among which you can easily discern numbers of ferns and mosses, two species of *Pitcairnia*, with beautiful red flowers, some aroids, various nettles, and, here and there, a *Begonia*. How different such a spot would look in cold Europe! Below, in the midst of a never-failing drizzle, grow luxuriant ardisias, aroids, ferns, costas, heliconias, centropogons, hydrocotyles, cyperoids, and grasses of various genera—tradescantias and commelynas, billbergias, and, occasionally, a few small rubiaceæ and melastomaceæ.

From near this spot we may start to ascend the Tocuche, our highest mountain—it is about 3,100 feet. There I shall be afforded another opportunity of pointing out some natural beauties. Through dense forests—composed of some of our choicest timbers, such as the locust, poui, and cedar, with here and there a wild plum-tree or a sterculia, and in which the under-wood is made up of melastomaceæ (*Clidemia* and *Miconia*), rubiaceæ, peppers, grasses, and cyperaceæ—you reach, about 1,500 feet higher up, a region where the aspect of the woods begins to change. Winds must blow here with great violence, at times, since the ground is strewed with small branches; humidity also is greater, as indicated by the number of mosses and ferns that clothe the trunks of the trees. Here is a kind of bamboo (*Chusquea*), a climbing plant which is not to be met with in the lower parts, and also very rarely on other mountains. The growth and size of the trees decrease as we gradually ascend higher and higher until we reach the summit, where they become stunted and scarce, being replaced by a small palm (*Geonoma*). Here occurs a new and interesting vegetation which exhibits some of the characters of the mountain districts of South America, as described by Humboldt, and others; here, also, we meet with one or two tree-ferns of a goodly size, a *Thibaudia*, and the beautiful *Utricularia Montana*, growing on trees like other parasites. Nearly all the stems are covered with jungermannias and mosses, ferns and small orchids; some spots are covered, exclusive of all other plants, with another bambusaceous grass, viz., the *Platonia Elata*.

As has already been remarked, the woods of the plains do not differ very materially from those of the lower mountains. There are only two species of our forest trees that are gregarious in growth, and that may be termed *social*—the *Mora*, which covers extensive tracts of land in different parts of the island; and the mangrove (*Rhizophora*), which grows in the saline swamps that border the sea; the rhizophora is, however, generally accompanied by the other species of mangrove, viz., the *Avicennia* and the *Conocarpus.* The conocarpus appears to be a salt-plant, for I also found it near the mud-volcanoes, together with a few other shrubs, and amarantaceous plants which thrive near the sea-shore.

Next to our forests, our so-called "natural savannahs" deserve notice. Four different classes may be distinguished, all more or less denuded of trees and shrubs. The first class is the periodically inundated savannahs of the coast, immediately in the rear of the mangrove forests of Caroni and Chaguanas. Coarse grasses and cyperoids, together with a slight sprinkling of convolvuli, hibisci, sesbaniæ, echites, and a few others, characterise these tracts; as they stretch towards the interior and the high woods, these plants become mixed up with grasses of a finer kind—an *Ambrosia*, *Malachra*, *Mimosa*, &c. Next to the above comes the savannah on the eastern side of the island, at a rather considerable distance from the sea. Here again the principal growth is of grasses and cyperoids, but of a different kind, though those of the former are not altogether excluded; but the finer sorts are more prevalent here, and the whole district bears a different appearance, particularly as this savannah is enlivened by the mauritia palm. There exists, in its vicinity, an extensive swamp covered with many trees, among which I have remarked the *Virola* in great numbers, together with the *Moronobea*, of Aublet. Here also is to be found a splendid *Crinum*, from eight to ten feet high when in bloom, the umbel of flowers measuring more than a foot in diameter.

The savannah of Aripo differs from the above-mentioned; it is, in the interior, subject to periodical but partial inundations, and covered with grasses and herbs altogether different, and, to the naturalist, of a much higher interest than the former specimens. The soil is a kind of sand covered with vegetable *detritus*. It is impossible to describe the feelings of the botanist when arriving at a field like this, so much unlike anything he has ever before seen. Here are full-blowing large orchids, with red, white, and yellow flowers; and, among the grasses, smaller ones of great variety, and as great scientific interest; melastomaceous plants of various genera (*Arthrostemma* and *Osbeckia*)—utricularias, droseras, rare and various grasses, and cyperoids of small sizes and fine kinds, with a species of *Cassytha;* in the water, *Ceratophyllum* and bog-mosses. Such a variety of forms and colours is nowhere else to be seen, or met with, in the island. This scenery is enlivened by groves of moriche and cabbage palms growing, here and there, in great luxuriance in the more inundated spots.

The transition from this kind of savannah to the dry savannah of the plain, or plateau, is exemplified in those known by the name of O'Mara and Piarco. They do not exhibit that variety of plants which adorn those already mentioned, but they still retain the same striking features, and the soil is undoubtedly of the same composition. The grasses are higher and coarser, and the savannahs themselves interspersed with two small trees—the *Chaparro* (*Curatella*) and a *Bunchosia;* here and there also a shrub of *Miconia*, or *Vismia*, with byttnerias, ruellias, and osbeckias. In the water-courses are to be found two plants, viz., an *Eriocaulon* and *Tonina*, which are, perhaps, to be found also at Aripo, together with the following: *Xyris*, *Mayaca*, *Hydrolea*, and, bordering on the high wood, *Rapatea*.

Somewhat resembling the above, but more destitute of similar shrubs, are the savannahs of Icacos, and those of Savanetta and Couva. The driest, however, as also the least interesting of our "natural savannahs," is that situated near Arima. It is overgrown with chaparros, under whose scanty shade grow coarse scrophularaceæ, principally *Beyrichia*, with a smaller quota of grasses and cyperoids; and, in moist spots, an abundance of *Heliconia Psittacorum*.

I would not, without much hesitation, class the savannahs on the mountains—from St. Joseph to Arima—among *natural* savannahs. They may possibly owe their origin to the destruction of forests by fire, in parts where the layer of soil was too thin to nourish a fresh generation of trees. They offer little interest to the botanist, and yet their exploration is rather difficult, the high rank grass they produce—*Pennisetum*, *Setaria*, *Andropogon*, &c.

—being mixed up with cutting sclerias, and others. However, whenever these savannahs have been cleared by burning, a more interesting vegetation succeeds; and I have found there, among other plants, several orchids, *Buchnera*, &c.

After thus endeavouring to present a picture of our forests and savannahs, as far as their botanical character is concerned, I will now proceed to give an account of the rivers and swamps.

Rivers with a rapid stream are of little interest to the botanist, and we have already noticed what plants are met with on their banks, when speaking of ravines and waterfalls. As to plants vegetating altogether in water, there are hardly any beyond a few algæ adhering to the roots of trees: those of a larger size would be carried away by freshets during the wet season. But those watercourses, which are rather mere estuaries, since their waters become salt during the dry season, deserve peculiar notice. As soon as the wet season sets in, they are seen covered with a thick carpetting of nymphæas, utricularias, pontederias, and azollas. This vegetation is nearly identical with that of our swamps or lagoons, for instance, those of Erin and Quemada; they exhibit, however, a few other plants which are not found at the above places, viz., *Salvinia*, *Limnobium*, *Ceratophyllum*, besides *Lemna* and *Pistia*. The half salt, or brackish swamps nourish, principally, large rushes, typhas, banisterias, and *Echites Biflora*, *Acrostichum Aureum*, and nearer to the sea, *Crenea* and *Antherylium*. In small water-pools or rivulets, in the plains of the interior districts, may be found *Ammania* and *Jussieua*, *Spilanthes*, several species of *Nerpestes*, *Mayaca*, and *Conobea*.

On sandy beaches, we observe, before all, the beautiful *Ipomea Pes Capræ* and another species with white flowers, a *Pancratium* and a *Remirea*, also several grasses of the following genera:—*Paspalum*, *Cenchrus*, *Stenotaphrum*, Cyperoids, and others. Further inward we meet with a dense shrubbery of *Chrysobalanus*, *Conocarpus*, *Paritium*, and *Bactris;* and beyond these, we may, perhaps, observe fields of *Gynerium Saccharoides*, or the white roseau.

The vegetation of the pitch-lake has its peculiarities, although no particular species grows there within my knowledge. In the middle of this curious spot there is, of course, no vegetation whatever, since the pitch is there in a state of ebullition; farther off this centre, and in the water of the many crevices which intersect the lake in every direction, the first traces of vegetation become perceivable—such as a few confervæ and a *Chara;* at a still greater circumference, the pitch, having been long exposed to the agencies of sun and rain, has become disaggregated, and in this kind of soil are found a few lichens, mosses, grasses, and cyperoids. In other places, where this layer is looser and thicker, we find the following:—a *Clusia*, *Chrysobalanus Icacos*, *Anona Palustris*, *Xyris*, bromeliaceæ, and ferns. The lake itself is bounded on one side by a kind of savannah—the sterility of this spot being exemplified by an undue proportion of sclerias, ferns, and melastomaceæ (*Osbeckia* and *Spennera*) together with bromelias dotting everywhere the rank grasses.

The islets of the Bocas are overgrown with plants which are, as it were, peculiar to them, and on that account they deserve a distinct notice. These islets are, for the most part, drier than the mainland of Trinidad, which circumstance is, undoubtedly, the great modifying cause inducing a botanical resemblance between the former and the Windward islands; whereas the flora of Guiana preponderates on the mainland. Any person landing on one of these islets must be struck at once with the difference: large bromelias, cactuses, and agaves, everywhere shoot up, with their characteristic features; and the thickets of brushwood are composed of helicteres, crotons, capparis, and mimosas, under whose shade thrives a luxuriant vegetation of evolvulus, ruellias, various commelynaceæ, amarantaceæ and compositæ, with only a very few grasses. One ridge is wholly occupied by the beautiful *Coutarea Speciosa*, one of the bark-trees of the West Indies.

The primæval forests of these small islands were probably destroyed at an early period, so that we cannot now affirm what they then were; but we must conjecture they were different from those of the mainland. The few plants which are now standing are of trifling interest to the botanist: besides, they do not display that marvellous vigour exhibited by the general vegetation of Trinidad. Almost constantly buffeted by strong blighting winds, they exhibit a ruffled appearance, just as the man harrowed by habitual passions, bears a peculiar cast of features. These trees belong to the genera bursera, gomphia, sabinea, bombax, and others.

Having thus, and as far as my abilities would allow, sketched the general features of our vegetable world in its natural state, I must now offer a few remarks on the appearance it takes under the fostering care of man, and the modifying influence of cultivation. The plants which are grown directly or indirectly, for the purpose of ministering to the sustenance and convenience of man, have been fully noticed in the work to which the present paper forms an appendix: they are therefore not to be considered here. But a few plants formerly introduced into Trinidad have been since allowed to degenerate into a wild state; of these I shall first speak. I must premise, however, that my data are not sufficiently authentic, and, of course, this part of my sketch, at least in a few instances, admits of doubts.

The first family which claims our attention is that of grasses—either as having produced a few troublesome intruders, or as having supplied useful individuals. The Guinea-grass (*Panicum Jumentorum*), though not, I believe, indigenous to Trinidad, is now found wild in some localities. A panicum grows at the Bocas islands, *called* Guinea-grass; it is very nearly allied to the former, but I am dubious as to their complete identity. Next to this comes the Para-grass, also a panicum, introduced here at some trouble, and which soon became an intolerable nuisance. I must also mention the Bahama-grass (*Cynodon Linearis*); this, however, was not perhaps intentionally introduced or propagated in the island. The same observation applies to the coco-nut tree.

A few amarantaceæ—for instance, *Amaranthus Spinosus*—were probably of foreign extraction, and accidentally imported. *Sesamum Orientale* grows wild here and there, but only in single specimens.

Among crassulaceæ, the *Bryophyllum Calycinum* deserves to be mentioned.

A few cucurbitaceæ were also brought in, no doubt, originally, as an article of sustenance; but from their immense spread they may now be considered almost as indifferent weeds: such are the common pumpkin and the mexicain (*Momordica Balsamina*).

Several species of opuntias and cereus are to be found everywhere: these certainly are not indigenous.

Two species of clerodendron are regular pests all round Port-of-Spain.

If, now, we turn to those plants which grow wild, although not indigenous, being of fortuitous introduction, our knowledge becomes more restricted still.

An European poa grows wild in the streets and courtyards of Port-of-Spain, and I am inclined to believe that scourge of the gardener and planter—the nut-grass (*Cyperus Hydra*)—to be a foreigner.

A number of so called cosmopolitan plants—such as the *Emilia Sonchifolia*, *Eclipta Erecta*, *Erigeron Canadense*, *Datura Stramonium*—are, in all probability, accidentally imported species.

Another class of plants calls for a few remarks in this place—I mean those which follow or accompany man on his path of settlement and in his cultivations, which cover the walls of neglected or abandoned dwellings, and are, for the most part, sure symptoms of his former residence in their localities. They are hardly to be met with anywhere else; so much so, that we can judge with certainty, by the mere presence of certain plants, that a plantation must have existed in such or such a place; in fact, that we are in a RASTRAJO. Now where, I would ask, were the germs of these plants previous to the eradication or decay of the original vegetation?

The streets of Port-of-Spain are overgrown by a number of plants of the genera cynodon, eleusine, cyperus, alternanthera, and euphorbia; these appear to become the more vigorous the more they are trodden upon. Others could not resist or survive this treatment, and, therefore, retire into vacant courtyards and abandoned lots—as, for instance, the peperomia, several urticas, and amaranthi, the *Elephanthopus Spicatus*, *Eclipta Erecta*, *Parthenium Hysterophorus*, *Synedrella Nodiflora*, a *Hedyotis*, *Leonurus Sibiricus*, solanum, datura, and physalis, *Scoparia Dulcis*, *Capraria Biflora*, a portulacca, a sida, and others less common. On crumbling roofs and dilapidated mason-work we may remark a barbula, *Gymnogramma Calomelanos*, *Dactyloctenium Ægyptiacum*, *Poa Ciliaris*, *Tradescantia Discolor*, urtica, and parietaria, *Boerhaavia Paniculata* (Rich.), eupatorium, and sonchus, barreria, and verbena, &c. Two vines, a cissus and the *Luffa Operculata*, cover nearly every old wall.

On road-sides, we meet with certain of the same plants we have just now enumerated, mixed up with a variety of species belonging to different families. Where the road traverses cultivated land, the following genera prevail:—Setaria, cenchrus, sporobolus, chloris, saccharum, andropogon, cyperus, and fuirena; in moist situations, spermacoce, and barreria, spigelia, asclepias, schultesia, and sabiea, hyptis and salvia, rivinia, sida, urena, euphorbia, and croton, osbeckia, crotalaria, æschynomene, and hedysarum: these grow in company with shrubs of the genera hamelia, randia, rauwolfia, and lantana; also with lianes and vines, such as convolvulaceæ, bignoniaceæ, echites, stigmophyllum, paullinia and leguminoseæ. A somewhat different assemblage prevails where the path lies through a forest: there we find ferns of the genera adiantum, lindsæa, trichomanes, lycopodium, and selaginella; xiphidium, piper, böhmeria, various rubiaceæ, acanthaceæ, and bignoniaceæ; petiveria, triumfetta, melastomaceæ, and others.

The sides of ditches are, generally, clothed with the following:—Bartramia, jungermanniaceæ, hemionitis, asplenium and anemia, lycopodium and selaginella; various grasses and cyperoids; dorstenia, leria, cephaelis, hedysarum and mimosa.

Cultivated grounds have also their peculiar inhabitants. Polypodium, aspidium, lindsæa and adiantum, large setarias, commelynaceæ, pupalia, centropogon, hedysarum and aroideæ delight in cacao plantations; paspalum and panicum, cyperus and mariscus, conyza and ageratum, eryngium, indigofera, hedysarum and desmodium, herpestes and drymaria, and, but too frequently, the alectra, or cane-killer, in sugar plantations: the alectra, however, is not limited to cane-fields. In provision-grounds and recently burnt land, the following genera occur:—Poa, panicum, cyperus, erigeron, porophyllum, emilia, spilanthus, neurolæna, erechtites, solanum, mitreola, priva, oxalis, wedelia, cenchrus, *Scoparia Dulcis*, *Eryngium Fœtidum*, microtea and croton.

In abandoned lands will grow, at first, the foregoing weeds, and soon after, the following shrubs:—Lantana, varronia, psidium, ochroma, cecropia, and abroma, and, among palms, the groo-groo, *acrocomia*, and astrocaryum.

The vegetation of our pasture-lands is composed, in addition to grasses and cyperoids, of hypoxis, cipura, araceæ, elephanthopus, spermacoce, spigelia, echites, *Asclepias Curassavica*, marsypianthes, solanum, achetaria, sauvagesia, osbeckia, hedysarum, and mimosa.

It now remains for me to enter upon the enumeration of all the genera I have had an opportunity of observing in the island—a list that will interest the general reader much less than the scientific man, or the student seeking information. Before, however, commencing this task, I will give a general sketch of what

Humboldt calls "Forms of Vegetation," and how far each of these is represented in Trinidad.

PALMS.—These are largely represented here, and among them we have the small geonoma, from three to four feet in height, as well as the stately *Oreodoxa*, or *Areca Oleracea*, with its lofty crest towering above our forest giants, and the climbing desmoncus winding upwards and downwards among its neighbours, sometimes to an enormous length. The pinnated-leaved genera outnumber, by far, those with fan-shaped leaves, of which there are only three species, to my knowledge. Our palms are seen to the best advantage in the savannahs at Aripo and the Cocal, where they form groups at shorter or longer intervals.

BANANAS.—This form embraces the plantain and banana, or Indian fig, as well as the balisiers, the ginger and arrow-root plants. We have a rich supply of these, and no doubt, in conjunction with the palms, they impart to our landscape some of its choicest features. Every person of taste must have been struck with the exquisite beauty of some of our glens and river hollows, in the composition of whose scenery the balisiers contribute an important item.

MALVACEÆ.—Humboldt finds the type of this form in those gigantic trees known here under the common name of silk-cottons. The latter we have in the island, as also a few others, viz., the wild chesnut (*Carolinea*) and the cork-wood (*Ochroma*). The first of these trees, the bombax, presents this striking peculiarity, that, besides its enormous proportions, it affords a hospitable home to a multitude of parasites from numerous families—such as ferns, wild pines, orchids, and cacti, besides a host of mosses and liverworts.

MIMOSEÆ.—The elegance of this form, both as regards branches and foliage, cannot fail to attract the attention of an observer. Of these, the tamarind tree is the most common example, but certainly not the most beautiful. This is to be found in the ingas and the genera deriving from them.

HEATHS.—We have nothing like this form.

CACTUS.—Excepting on the Bocas islands, these have but few representatives here, on account of the great fertility of the soil and the abundant atmospheric moisture.

ORCHIDS.—It is well known that we possess many individuals of this strange family, though they are becoming more rare in the vicinity of cultivations—at least their finer kinds. But in the forests they occur at every step, displaying their graceful forms and gorgeous hues.

CASUARINAS.—There are a few of these—cultivated.

PINES.—We have no pines, except a few cultivated specimens, stunted and miserable-looking, as if longing for "sweet home." There is a ridiculous exhibition of them, in front of Trinity church, Port-of-Spain.

POTHOS AND AROIDS.—We are very rich in this form, there being all imaginable varieties of them. From the numerous species of anthurium, growing like parasites on trees, various species of caladium and others; from the widely known and useful mamure (*Carludovica*) which furnishes the settlers with natural twine and rope, down to the dumb-cane (*Dieffenbachia*) and smaller aroids growing on river-sides, together with the curious cyclanthus—all are equally interesting and attractive. Tanias and seguines belong to this form. An interesting plant of this class is the *Montrichardia*, the largest of all, covering our half-salt, brackish swamps for miles: its seeds supply a sort of chesnut, which certainly no one would have expected.

LIANES.—We have already had occasion to observe how rich our forests are in this form—the truly distinctive feature of the tropical woods. A great number of families supply examples—the most prominent being bignonias, malpighiaceæ, bauhinias and dilleniaceæ: they assume all possible forms, sometimes being twisted together like ropes, or flattened like tapes; sometimes they creep up the highest trees, thence to hang down in elegant festoons, or coil around the stems, like giant serpents, attempting to stifle their supporters. A few run along the ground, their hooks and thorns catching or tearing the incautious hunter, who, in return, has honoured them with the appellation of *Boyaux-Diable* (devil's-guts) and *Crocs-chien* (dog's-teeth). Others hang a few feet only from the ground, in readiness to cut and tear the clothes of the threader of their mazes. A great many, on the other hand, supply, in case of need, as I have more than once experienced during my rambles in our forests, an abundance of fresh water of a deliciously cool and refreshing quality. A large proportion of our lianes bear the finest flowers; I need only mention the bignonias, dolichos, norantea, the passion-flowers and the securidaca.

ALOES.—There is but one plant here as a representative of this form—the agave—which grows principally at the Bocas islands, in great numbers and with much vigour.

GRASSES—mainly arborescent.—Although the bamboo, which chiefly represents this form in our island, is a foreigner, yet it has spread all over the colony to such an extent, that it becomes, in many places, an indispensable adjunct to our island landscape. We possess, however, an indigenous bamboo, which may be seen at Caroni, Chaguanas, and Couva, and also the elegant chusquea, which we have noticed on the *Tocuche.*

FERNS.—We have a few tree-ferns, as I have already mentioned; but as they grow on the top of our highest *mornes*, they are not easily reached. Notwithstanding, the form of ferns has here a large number of representatives, and in many localities they add no inconsiderable charm to the refreshing scenery of our valleys and ravines.

LILIES.—Although we have a number of very elegant pancratiums, crinums, and amaryllides, yet a South American island is not exactly the spot in which a botanist would seek or expect a rich assemblage of these plants. The only part where the importance of this form is exhibited to any advantage, is the swamp near the savannah at the Cocal.

WILLOWS.—Not represented here.

MYRTLES.—In dry and somewhat sterile spots, we generally meet with a peculiar vegetation, characterised by not very large trees, with slender branches, small leaves of a dark shining green, and a roughness of the stem, owing to the shedding of their bark. These are myrtles. But the myrtle form does not possess here that importance it assumes in higher latitudes, and in New Holland.

MELASTOMAS.—If we are rather poor in myrtles, this deficiency is compensated by the melastomaceæ, a form not very remote from the preceding. The plants belonging to it are, generally, shrubs or small trees, with dark green leaves, distinguishable by very prominent longitudinal ribs. The flowers commonly form large rich clusters, and are frequently very fragrant. They are closely allied to the next class.

LAURELS.—This closes the list of forms, as enumerated by Von Humboldt. He adds to this form, that tribe of plants to which belong the mammee and the *Matapalo* of our forests—

distinguishable by a very fine foliage and large flowers, generally fragrant. We are, therefore, induced to aggregate to them the moronobea—one of the finest ornaments of our woods—the different species of clusia, also, the rose-apple tree, though an exotic.

There is one form of trees which Von Humboldt has omitted, and which cannot fail to attract the notice of the least attentive, as very peculiar and highly characteristic. I would call it the Papaw form.

PAPAYAS.—A naked trunk, or branches, crowned by a cluster of large leaves with long stalks, will characterise this form. Besides the type-form—the papaw—we must notice the trumpet-tree (*Cecropia Peltata*) and a species of panax, common in cultivated grounds.

I have now nearly arrived at the conclusion of my task, since it remains for me but to give a list of all the genera I have, up to the present time, had opportunities of observing. However long and learned this list may appear to the general reader, yet its perusal will afford but little satisfaction to the scientific man. It is therefore natural that, for the information of the latter, I should prefix this bare classification by a few words of explanation. Though I have been engaged now more than fourteen years in researches connected with the vegetable world of Trinidad, I have rather given preference to the study of morphology, anatomy, and physiology, contributing the result of my investigations therein, from time to time, to the scientific papers of Germany. To the lower families of plants, in particular, I have not been able to devote that time and attention they deserve; and, as a consequence, it will appear that they have been neglected. I have also already explained the reason for my having refrained from determining the numerous species of plants which compose the flora of Trinidad.

A CATALOGUE OF THE DIFFERENT FAMILIES AND GENERA OF PLANTS EXISTING IN TRINIDAD, AS HAVING PASSED UNDER MY OWN OBSERVATION.

Algæ—	
Oscillaria.	
Zygnema.	
Conferva.	
Vancheria.	
Ulva.	
Sphærococcus.	
Zonaria.	
Characeæ—	
Chara	Ag.
Lichens—	
Cænogonium.	
Parmelia.	
Fungi—	
Uredo	Pers.
Torula	Pers.
Phragmidium	Link.
Didymosporium	Nees.
Coryneum	Fries.
Tubercularia	Tode.
Psilonia	Fries.
Fusisporium	id.
Bacridium	Kunz.
Oidium	Link.
Sporotrichum	id.
Botrytis	Mich.
Aspergillus	id.
Eurotium	Link.
Pilobolus	Tode.
Isaria	Pers.
Erysibe	Reb.
Stemonitis	Gled.
Physarum	Pers.
Geaster	Mich.
Nidularia	Fries.
Clathrus	Mich.
Phallus	id.
Hysterium	Fries.
Sphæria	Hall.
Hypoxilon	Bull.
Tremella	Dill.
Peziza	id.
Helvella	L.
Hydnum	L.

Fungi (continued)—	
Polyporus	Fries.
Agaricus (a)	L.
Hepaticæ—	
Riccia	Miche.
Anthoceros	Mich.
Marchantia	March.
Jungermannia	Dill.
Musci—	
Sphagnum	Dill.
Fissidens	Hedw.
Bryum	Dill.
Bartramia	Hedw.
Calympere	Sw.
Syrrhopodon	Schu.
Barbula	Hedw.
Macromitrium	Br.
Dicranum	Hedw.
Hypopterygium	Brid.
Mniadelphus	C. Mül.
Neckera	Hedw.
Polytrichum	P. Bea.
Hookeria	Sw.
Hypnum	Dill.
Filices—	
Gleichenia	Smith.
Mertensia	Willd.
Cyathea	Presl.
Cnemidaria	Presl.
Alsophila	Br.
Lastrea	Pres.
Oleanara (b)	Cavan.
Nephrolepis	Schott.
Palystichum	id.
Aspidium	id.
Blechnum	L.
Asplenium	L.
Diplazium	Sw.
Davallia	Smith.
Lindsæa	Dryan.
Dicksonia	Pr.
Lomaria	Willd.
Pteris	L.
Allosorus	Bernh.

(a) Our edible mushroom.

(b) Hart's tongue.

Filices (continued)—	
Adiantum (a)	L.
Cheilanthes	Sw.
Vittaria	Smith.
Polypodium	L.
Marginaria	Bory.
Campyloneurum	Pr.
Pleopeltis	Hum.
Phymatodes	Pr.
Monogramma	Sch.
Hemionitis	L.
Pleurogramma	Bl.
Grammitis	Sw.
Meniscium	Schreb.
Gymnogramma	Desi.
Polybotria	Hum.
Olfersia	Raddi.
Acrostichum	L.
Parkeria	Hook.
Hymenophyllum	Sw.
Trichomanes	L.
Aneimia	Sw.
Schizæa	Sw.
Lygodium	Sw.
Ophioglossum	L.
Hydropterides—	
Azolla	Lam.
Salvinia	Mich.
Lycopodiaceæ—	
Lycopodium	L.
Selaginella	Pal.
Balanophoraceæ—	
Helosis	Rich.
Graminaceæ—	
Leersia	Sol.
Oryza	L.
Pharus	P. Br.
Zea (b)	L.
Coix (c)	L.
Paspalum (d)	L.
Olyra	L.
Eriochloa	Kunth.
Panicum (e)	L.
Stenotaphrum	Trin.
Oplismenus	Pal.
Pennisetum	Rich.
Cenchrus	L.
Sporobolus	R. B.
Gynerium (f)	H.B.K
Cynodon (g)	Rich.

Graminaceæ (continued)—	
Dactyloctenium	Willd.
Chloris	Sw.
Leptochloa	Pal.
Eleusine (h)	Gaert.
Poa	L.
Orthoclada	Pal.
Streptogyna	id.
Chusquea (i)	Kunth.
Nastus (j)	Jus.
Tripsacum	L.
Eriochrysis	Pal.
Saccharum (k)	L.
Anthistiria	L.
Andropogon (l)	L.
Ischæmum	L.
Cyperaceæ—	
Scleria (m)	Berg.
Rhynchospora	Vahl.
Dichromena	Rich.
Remirea	Aubl.
Diplasia	Rich.
Fuirena	Rottb.
Fimbristylis	Vahl.
Isolepis	R. B.
Cyperus (n)	L.
Eriocaulonaceæ—	
Eriocaulon	Gron.
Tonina	Aubl.
Xyridaceæ—	
Xyris	L.
Mayaca	Aubl.
Commelynaceæ—	
Commelyna (o)	Dill.
Aneilema	R. B.
Callisia	Löeffl.
Tradescantia	L.
Dichorisandra	Mich.
Juncaceæ—	
Rapatea	Aubl.
Pontederiaceæ—	
Pontederia	L.
Smilaceæ—	
Smilax (p)	Tourn.
Dioscoreaceæ—	
Rajania	L.
Dioscorea (q)	Plum.
Hydrocharidaceæ—	
Limnobium	Rich.

(a) Maiden-hair.
(b) Maize.
(c) Job's tears.
(d) Lancet-grass.
(e) Guinea-grass.
(f) White roseau.
(g) Bahama-grass.
(h) Pied-poule.
(i) Vine bamboo.
(j) Common bamboo.
(k) Sugar-cane.
(l) Lemon-grass.
(m) Sword-grass.
(n) Nut-grass.
(o) Herbe-grasse
(p) Sarsaparilla.
(q) Yam.

Burmanniaceæ—	
Dictyostega	Miers.
Iridaceæ	
Cipura	Aubl.
Hæmodoraceæ—	
Xyphidium	
Hypoxidaceæ—	
Hypoxis	L.
Amaryllidaceæ—	
Amaryllis (a)	L.
Crinum	L.
Pancratium	L.
Alstrœmeria	L.
Agave (b)	L.
Bromeliaceæ—	
Ananassa (c)	Lindl.
Bromelia (d)	L.
Bilbergia (e)	Thun.
Pitcairnia (e)	Herit.
Tillandsia (e)	L.
Gusmannia	R. & P.
Orchidaceæ—	
Pleurothallis	R. B.
Specklinia	Lindl.
Lepanthes	Sw.
Stelis	id.
Liparis	Rich.
Bolbophyllum	Tho.
Polystachya	Hook.
Epidendrum	L.
Isochilus	R. B.
Cattleya	Lindl.
Nanodes	id.
Trizeuxis	id.
Ornithocephalus	Hook.
Maxillaria	R. & P.
Bifrenaria	Lindl.
Catasetum	Rich.
Stanhopea	Hook.
Gongora	R. & P.
Coryanthes (f)	Hook.
Peristera	id.
Cymbidium	Sw.
Cyrtopodium	R. B.
Cyrtoptera	Lindl.
Notylia	id.
Ionopsis	H.B.K.
Rodriguezia	R. & P.
Bourlingtonia	Lindl.
Orchidaceæ (continued)—	
Macradenia	R. B.
Cryptarrhena	id.
Oncidium (g)	Sw.
Fernandezia	R. & P.
Dichæa	Lindl.
Brassia	R. B.
Angræcum	Thou.
Habenaria	Willd.
Spiranthes	Rich.
Pelexia	Poit.
Prescottia	Lindl.
Cleistes	Rich.
Epistephium	H.B.K
Vanilla	Sw.
Schomburgkia	Lindl.
Batemania	id.
Paphinia	id.
Zingiberaceæ—	
Alpinia (h)	L.
Costus (i)	L.
Cannaceæ—	
Thalia	L.
Maranta (j)	Plum.
Calathea (k)	Meyer.
Canna (l)	L.
Musaceæ—	
Heliconia (m)	L.
Naiadaceæ—	
Zostera	L.
Lemnaceæ—	
Lemna	L.
Araceæ—	
Pistia	L.
Caladium (n)	Vent.
Philodendron (o)	Schott.
Dieffenbachia (p)	id.
Monstera (q)	Adans.
Montrichardia	Crüger
Massowia	Koch.
Anthurium	Schott.
Typhaceæ—	
Typha	Tourn.
Pandanaceæ—	
Carludovica (r)	R. & P.
Cyclanthus	Poit.
Palmaceæ—	
Oreodoxa (s)	Willd.
Mauritia (t)	L. son.

(a) Lily.
(b) Langue-bœuf.
(c) Pine-apple.
(d) Caratas.
(e) Wild pine-apple.
(f) Macaque.
(g) Butterfly and flies.
(h) Mardi-gras.
(i) Canne-de-rivière.
(j) Arrow-root.
(k) Aruma.
(l) Tuluma.
(m) Balizier.
(n) Tanias.
(o) Seguine.
(p) Seguine-diable.
(q) Ceriman.
(r) Mamure.
(s) Mountain cabbage.
(t) Moriche.

Palmaceæ (continued)—	
Geonoma	Willd.
Manicaria (a)	Gaert.
Copernicia (b)	Mart.
Thrinax	L. son.
Desmoncus (c)	Mart.
Bactris (d)	Jacq.
Guilielma (e)	Mart.
Acrocomia (f)	id.
Astrocaryum	Meyer.
Elaïs	Jacq.
Cocos (g)	L.
Taxaceæ—	
Podocarpus	Herit.
Piperaceæ—	
Piper (h)	L.
Peperomia (i)	R. & P.
Ottonia (j)	Spren.
Ceratophyllaceæ—	
Ceratophyllum	L.
Ulmaceæ—	
Celtis	Tourn.
Moraceæ—	
Morus (k)	id.
Ficus (l)	id.
Dorstenia (m)	Plum.
Artocarpaceæ—	
Brosimum (n)	Sw.
Cecropia (o)	L.
Coussapoa	Aubl.
Trophis	P. Br.
Urticaceæ—	
Urtica (p)	Tourn.
Boehmeria	Jacq.
Parietaria	Tourn.
Lacistemaceæ—	
Lacistema	Sw.
Amarantaceæ—	
Iresine	Willd.
Alternanthera (q)	Forsk.
Gomphrena	L.
Pupalia	Mart.
Amaranthus (r)	L.
Chamissoa	H.B.K.
Polygonaceæ—	
Polygonum	L.
Coccoloba (s)	Jacq.

Nyctaginaceæ—	
Boerhaavia	L.
Pisonia	Plum.
Monimiaceæ—	
Siparouna	Aubl.
Tetratome	Pöpp.
Lauraceæ—	
Aiovea	Aubl.
Ocotea	id.
Cassytha	L.
Hernandiaceæ—	
Hernandia (t)	
Proteaceæ—	
Rhopala (u)	Aubl.
Aristolochiaceæ—	
Aristolochia (v)	Tourn.
Plantaginaceæ—	
Plantago (w)	L.
Plumbaginaceæ—	
Plumbago	Tourn.
Compositæ—	
Odontoloma	H.B.K.
Sparganophorus	Vent.
Vernonia	Schre.
Elephanthopus	L.
Rolandra	Rottb.
Liabum	Adans.
Pectis	L.
Isocarpha	R. B.
Ageratum	L.
Hebeclinium	de C.
Eupatorium (x)	Tourn.
Mikania (y)	Willd.
Erigeron	de C.
Conyza	Less.
Baccharis	L.
Pluchea (z)	Cass.
Eclipta	L.
Clibadium (aa)	L.
Ambrosia (bb)	Tourn.
Parthenium	L.
Wedelia	Jacq.
Melanthera	Rohr.
Wulffia	Neck.
Gymnopsis	de C.
Leighia	Cass.
Bidens	L.

(a) Timit.
(b) Carat.
(c) Groa-groa.
(d) Black roseau.
(e) Pirijao.
(f) Groo-groo.
(g) Coco-palm.
(h) Black pepper.
(i) Herbe-couresse.
(j) Potomo.
(k) Fustic.
(l) Wild fig-tree.
(m) Contra-yerva.
(n) Moussara.
(o) Trumpet-tree.
(p) Nettle.
(q) Herbe-à-vache.
(r) Spinage.
(s) Sea-side grape
(t) Mirobolant.
(u) Aguatapana.
(v) Snake-root.
(w) Plantain.
(x) Herbe-à-pino.
(y) Guaco.
(z) Guérit-tout.
(aa) Barbasco.
(bb) Altamisa.

Compositæ (continued)—

Cosmos	Caï.
Verbesina	Less.
Spilanthes	Jacq.
Synedrella	Gaert.
Porophyllum	Vail.
Calea	R. B.
Neurolæna (a)	id.
Erechtites	Rafin.
Emilia	Cass.
Lerïa	de C.
Sonchus	L.

Lobeliaceæ—

Lobelia	L.
Laurentia	Neck.
Centropogon	Presl.

Pongatieæ—

Pongatium	Jus.

Rubiaceæ—

Borreria (b)	Meyer.
Spermacoce	L.
Diodia	L.
Cephaelis	Sw.
Palicourea	Aubl.
Psychotria	L.
Coffea (c)	L.
Faramea	Rich.
Chiococca (d)	P. B.
Lygodisodea	R. & P.
Nonatelia	Aubl.
Sabicea	id.
Hamelia	Jacq.
Isertia	Schreb.
Gonzalea	Pers.
Hedyotis	Lam.
Sipanea	Aubl.
Calycophyllum	de C.
Manettia	Mutis.
Hillia	Jacq.
Coutarea (e)	Aubl.
Nauclea	L.
Bertiera	Aubl.
Randia	Houst.
Genipa	Bl.
Amaioua	Aubl.

Oleaceæ—

Linociera	Sw.

Loganiaceæ—

Strychnos	L.

Apocynaceæ—

Allamanda	L.

Apocynaceæ (continued)—

Vallesia	R. & P.
Thevetia	L.
Rauwolfia	Plum.
Tabernæmontana	L.
Echites	P. B.
Dipladenia	Al.

Asclepiadaceæ—

Metastelma	R. B.
Sarcostemma	id.
Philibertia	H.B.K.
Asclepias	L.
Gonolobus	Rich.
Marsdenia	R. B.

Gentianaceæ—

Voyria	Aubl.
Schultesia	Mart.
Lisianthus	P. B.
Coutoubea	Aubl.
Slevogtia	Rich.
Mitreola	L.

Spigeliaceæ—

Spigelia (f)	L.

Labiatæ—

Ocimum (g)	L.
Marsypianthes	Mart.
Hyptis (h)	Jacq.
Salvia	L.
Leonurus	L.
Leonotis	Pers.

Verbenaceæ—

Lippia	L.
Verbena (i)	L.
Priva	Adan.
Lantana (j)	L.
Tamonia	Aubl.
Hosta	Jacq.
Vitex (k)	L.
Citharexylon	L.
Duranta	L.
Petræa	Houst.
Amasonia	L.
Ægiphila	Jacq.

Myoporaceæ—

Avicennia (l)	L.
Bontia	Plum.

Cordiaceæ—

Cordia (m)	R. B.

Ehretiaceæ—

Ehretia	L.

(a) Herbe-à-pique.
(b) Macornette.
(c) Coffee.
(d) Petit branda.
(e) Bocas bark.
(f) Brinvilliers.
(g) Petit baume.
(h) Frombasin.
(i) Verveine.
(j) Cariaquite.
(k) Fiddle-wood, or bois-lézard.
(l) Mangrove.
(m) Cyp.

Ehretiaceæ (continued)—	
Beurreria	Jacq.
Tournefortia	R. B.
Heliotropium	L.
Convolvulaceæ—	
Evolvulus	L.
Convolvulus	L.
Calonyction	Chois.
Quamoclit	Tourn.
Batatas (a)	Chois.
Pharbitis	Chois.
Hydroleaceæ—	
Hydrolea	
Wigandia	
Solanaceæ—	
Nicotiana	L.
Solandra	Sw.
Physalis	L.
Solanum	L.
Cestrum	L.
Scrophulariaceæ—	
Browallia	L.
Brunfelsia	Plum.
Capraria (b)	L.
Herpestes	Gaert.
Achetaria	Cham.
Buchnera	L.
Scoparia (c)	L.
Alectra (d)	Thunb.
Acanthaceæ—	
Thunbergia	L.
Hygrophila	R. B.
Ruellia	L.
Aphelandra	R. B.
Eranthemum	id.
Blechum	P. B.
Dicliptera	Jus.
Trichanthera	Kunth.
Bignoniaceæ—	
Tecoma (e)	Jus.
Spathodea (f)	Pal.
Bignonia (f)	Jus.
Gesneriaceæ—	
Columnea	Plum.
Besleria	Plum.
Drymonia	Mart.
Gesnera	id.
Gloxinia	Herit.
Rytidophyllum	Mart.
Conradia	id.

Crescentiaceæ—	
Crescentia (g)	L.
Utriculariæ—	
Utricularia	L.
Myrsinaceæ—	
Myrsine	L.
Ardisia	Sw.
Jacquinia	L.
Sapotaceæ—	
Chrysophyllum (h)	L.
Sabatia	Sw.
Achras (i)	P. B.
Lucuma	Jus.
Ebenaceæ—	
Diospyros	L.
Ericaceæ—	
Clethra	L.
Thibaudia	Par.
Umbelliferæ—	
Hydrocotyle	Tourn.
Spananthe	Jacq.
Eryngium	Tourn.
Araliaceæ—	
Panax	L.
Ampelidaceæ—	
Cissus	L.
Loranthaceæ—	
Viscum	L.
Loranthus	L.
Menispermaceæ—	
Cissampelos (j)	L.
Myristicaceæ—	
Myristica (k)	L.
Anonaceæ—	
Uvaria (l)	L.
Anona (m)	L.
Dilleniaceæ—	
Curatella (n)	L.
Doliocarpus	Rol.
Tetracera	L.
Ranunculaceæ—	
Clematis	L.
Papaveraceæ—	
Argemone	Tourn.
Cruciferæ—	
Nasturtium (o)	R. B.
Lepidium	id.
Sinapis	Tourn.
Capparidaceæ—	
Cleome	de C.

(a) Sweet potato.
(b) Thé-pays.
(c) Sweet broom.
(d) Cane-killer.
(e) Poui.
(f) Cable-vine.
(g) Calabash.
(h) Cainito.
(i) Sapodilla and Balata.
(j) Pareira-brava.
(k) White cedar.
(l) Fruta de Burro.
(m) Sour-sop.
(n) Chaparrio.
(o) Water-cress.

Capparidaceæ (continued)—	
Capparis	L.
Cratæva (a)	L.
Hermupoa	Löeffl.
Nymphæaceæ—	
Nymphæa (b)	Neck.
Droseraceæ—	
Drosera	L.
Violaceæ—	
Alsodeia	Thou.
Sauvagesiaceæ—	
Sauvagesia	L.
Turneraceæ—	
Turnera	Plum.
Samydaceæ—	
Samyda	L.
Casearia	Jacq.
Bixaceæ—	
Bixa (c)	L.
Flacourtia (d)	Comm.
Passifloraceæ—	
Ryania	Vahl.
Passiflora (e)	Jus.
Papayaceæ—	
Carica (f)	L.
Cucurbitaceæ—	
Feuillea (g)	L.
Melothria	L.
Anguria	L.
Bryonia (h)	L.
Luffa (i)	Tourn.
Momordica (j)	L.
Begoniaceæ—	
Begonia (k)	L.
Cactaceæ—	
Cereus	Hau.
Rhipsalis	Gaert.
Opuntia (l)	Tourn.
Pereskia (m)	Plum.
Phyllocactus	Link.
Portulaceæ—	
Sesuvium	L.
Cypselea	Turp.
Portulaca (n)	Tourn.
Talinum	Adans.
Caryophyllaceæ—	
Drymaria	Willd.
Phytolaccaceæ—	
Petiveria	Plum.
Rivina	L.
Microtea	Sw.
Phytolacca	Tourn.
Malvaceæ—	
Urena	L.
Pavonia	Cav.
Hibiscus (o)	L.
Paritium	A. Jus.
Thespesia	Corr.
Sida (p)	Kunth.
Malachra (q)	L.
Sterculiaceæ—	
Pachira	Aubl.
Bombax (r)	L.
Ochroma (s)	Sw.
Helicteres	L.
Sterculia (t)	L.
Byttneriaceæ—	
Buttneria	Löeffl.
Guazuma (u)	Plum.
Waltheria	L.
Melochia	L.
Tiliaceæ—	
Sloanea	L.
Apeiba	Aubl.
Triumfetta	Plum.
Muntingia	L.
Ternstroemiaceæ—	
Marila	Sw.
Quuna	Aubl.
Clusiaceæ—	
Clusia (v)	L.
Calophyllum (w)	L.
Moronobea (x)	Aubl.
Marcgraviaceæ—	
Norantea (y)	Aubl.
Marcgravia	Plum.
Hypericaceæ—	
Vismia (z)	Vell.
Meliaceæ—	
Trichilia	L.
Guarea	L.
Carapa (aa)	Aubl.
Cedrelaceæ—	
Cedrela (bb)	L.

(a) Toco.
(b) Water-lily.
(c) Arnotto.
(d) Governor-plum.
(e) Granadilla.
(f) Papaw.
(g) Secua.
(h) Bryony.
(i) Torchon.
(j) Mexicain.
(k) Wood-sorrel.
(l) Prickly-pear.
(m) Gooseberry.
(n) Purslane.
(o) Ochro.
(p) Broom-plant.
(q) Mallow.
(r) Ceyba.
(s) Cork-wood.
(t) Mahaut.
(u) Elm.
(v) Matapalo.
(w) Galba.
(x) Mountain-mangrove.
(y) Prince of Wales' feather.
(z) Bois-sang.
(aa) Carapa, or crapaud.
(bb) Cedar.

Malpighiaceæ—	
Hiræa	Jacq.
Triopteris	L.
Tetrapteris	Car.
Banisteria	L.
Stigmaphyllon	A. J.
Bunchosia	Rich.
Erythroxylaceæ—	
Erythroxylum	L.
Sapindaceæ—	
Cardiospermum	L.
Seriana	Plum.
Paullinia	L.
Sapindus (a)	L.
Melicocca (b)	L.
Dodonæa	L.
Polygalaceæ—	
Polygala	L.
Catacoma	Bent.
Securidaca (c)	L.
Hippocrateaceæ—	
Hippocratea (d)	L.
Tontelea	Aubl.
Rhamnaceæ—	
Gouania	Jacq.
Chailletiaceæ—	
Chailletia	de C.
Euphorbiaceæ—	
Pedilanthus	Neck.
Euphorbia (e)	L.
Dalechampia	Plum.
Hura (f)	L.
Hippomane (g)	L.
Microstachis	A. Jus.
Tragia	Plum.
Acalypha	L.
Omphalea	L.
Mabea	Aubl.
Jatropha (h)	Kunth.
Curcas (i)	Adans.
Croton	L.
Phyllanthus	Sw.
Stillingia	Gard.
Anarcadiaceæ—	
Anarcadium (j)	Rottb.
Spondiaceæ—	
Spondias (k)	L.
Burseraceæ—	
Icica	Aubl.
Bursera	Jacq.

Connaraceæ—	
Connarus	L.
Omphalobium	Gaert.
Ochnaceæ—	
Gomphia	Shreb.
Simardubaceæ—	
Quassia (l)	de C.
Rutaceæ—	
Esenbeckia (m)	Kunth.
Oxalidaceæ—	
Oxalis	L.
Combretaceæ—	
Bucida (n)	L.
Terminalia (o)	L.
Conocarpus (p)	Gaert.
Poivrea	Comm.
Combretum	Löefl.
Cacoucia	Aubl.
Rhizophoraceæ—	
Rhizophora (q)	Lam.
Legnotideæ—	
Cassipourea	Aubl.
Onagraceæ—	
Jussieua	L.
Lythraceæ—	
Ammannia	Houst.
Crenea	Aubl.
Antherylium	Rohr.
Melastomaceæ—	
Spennera	Mart.
Heteronoma	id.
Chactogastra	de C.
Arthrostemma	Par.
Osbeckia	L.
Pterolepis	de C.
Clidemia	Don.
Tchudya	de C.
Ossaca	id.
Sagræa	id.
Conostegia	Don.
Diplochiton	de C.
Pogonorhynchus	Cr.
Henriettca	de C.
Loreya	id.
Tetrazygia	Rich.
Miconia	R. & P.
Glossocentrum	Cr.
Cremanium	Don.
Chaenopleura	Rich.

(a) Savonette.
(b) Quenepe.
(c) Liane-paques.
(d) Sto. Domingo-nut.
(e) Euphorbs.
(f) Sand-box.
(g) Manchineel.
(h) Manioc.
(i) Medicinier.
(j) Cashew.
(k) Wild-plum, or monbin.
(l) Bitter ash.
(m) Gasparil.
(n) Olivier.
(o) Almond-tree.
(p) Black mangrove.
(q) Red mangrove.

Myrtaceæ—	
Psidium (a)	L.
Myrtus (b)	Tourn.
Myrcia	de C.
Marlierea	St. Hil.
Lecythidaceæ—	
Lecythis (c)	Löeffl.
Couroupita (d)	Aubl.
Drupaceæ—	
Prunus (e)	L.
Chrysobalanaceæ—	
Chrysobalanus (f)	L.
Hirtella	L.
Parinarium	Jus.
Papilionaceæ—	
Crotalaria	L.
Psoralea	L.
Indigofera (g)	L.
Tephrosia	Pers.
Sabinea	de C.
Sesbania	Pers.
Æschinomene	L.
Desmodium	de C.
Rhadinocarpus	Vog.
Clitoria	L.
Neurocarpum	Desy.
Centrosema	de C.
Galactia	P. B.
Canavalia	de C.
Mucuna (h)	Adans.
Erythrina (i)	L.
Papilionaceæ (continued)—	
Phaseolus (j)	L.
Dolichos (k)	L.
Eriosema	de C.
Rhynchosia	id.
Abrus (l)	L.
Amerimnum	P. B.
Drepanocarpus	Mey.
Machærium (m)	Pers.
Andira (n)	Lam.
Mora (o)	Bent.
Cæsalpinia	Plum.
Parkinsonia	id.
Cassia (p)	L.
Hymenæa (q)	L.
Caulotretus (r)	Rich.
Bauhinia (s)	Plum.
Macrolobium	Schr.
Copaifera (t)	L.
Brownea (u)	Jacq.
Swartzia	Willd.
Pentaclethra	Bent.
Entada	L.
Desmanthus	Bent.
Mimosa (v)	L.
Acacia (w)	Willd.
Calliandra	Bent.
Inga (x)	P. B.
Pithecolobium	Mart.
Enterolobium	id.

(a) Guava.
(b) Pimento, or bois d'Inde.
(c) Guatecare.
(d) Bomb-tree.
(e) Noyau.
(f) Icacos.
(g) Indigo.
(h) Cowhage.
(i) Bois-immortel.
(j) Beans.
(k) Stump-pea.
(l) Liquorice.
(m) Roble (?).
(n) Angelim.
(o) Mora.
(p) Stinking-weed, and others.
(q) Locust.
(r) Tasajo-liane.
(s) Pata-de-vaca.
(t) Balsam-capivi.
(u) Palo-rosa.
(v) Sensitive-plant.
(w) Acacia.
(x) Pois-doux.

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